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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/065,094	09/17/2002	Craig A. Jackson	014191.01	6732

7590 10/04/2004

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EXAMINER	
BECK, DAVID THOMAS	

ART UNIT	PAPER NUMBER
1732	

DATE MAILED: 10/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/065,094	JACKSON ET AL.	
	Examiner	Art Unit	
	David T. Beck	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

   I. Claims 1-14, drawn to a process of making, classified in class 264, subclass 172.11.

   II. Claims 15-26, drawn to the product made, classified in class 428, subclass 359.

The inventions are distinct, each from the other because of the following reasons:

Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP §806.05(f)). In the instant case, the product can be made by another and materially different process because a colorable mono-component filament having a good dyeability characteristic can be made by using only virgin polymer rather than combining virgin and recycle polymer.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

During a telephone conversation with Mr. Craig Lundell on September 20, 2004, a provisional election was made without traverse to prosecute the invention of Group I, claims 1-14, drawn to a process. Affirmation of this election must be made by applicant

in replying to this Office action. Claims 15-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1,2,4 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Kawauchi (5,276,083).

With regard to claim 1, Kawauchi discloses a process for making a colorable filament comprising blending virgin polymer with recycle polymer (column 16, lines 54-67), forming the mixture into a filament (column 17, lines 11-14) with good colorability (column 17, lines 22-37).

With regard to claim 2, Kawauchi discloses a first step of making and a second step of dyeing the filament (column 17, lines 12-37).

With regard to claim 4, Kawauchi discloses that the polymer is polyester (column 16, lines 55-56).

With regard to claim 11, Kawauchi discloses that the polymer is polyethylene terephthalate (column 16, lines 55-56).

4. Claims 1,4, and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Butterfass et al (5,565,269).

With regard to claim 1, Butterfass et al discloses a process for making a colorable filament comprising blending virgin polymer with recycle polymer (column 3, lines 6-19), forming the mixture into a filament (column 2, lines 55-56) with good colorability (column 4, lines 10-16).

With regard to claim 4, Butterfass et al discloses that the polymer is polypropylene (column 1, lines 34-37).

With regard to claim 13, Butterfass et al discloses adding a pigment to the mixture while making the mixture (column 2, lines 59-61).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 1,3,4,5,6,8,10 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sferrazza et al (5,535,945) in view of Studholme (6,334,877).

With regard to claim 1, Sferrazza et al teaches blending virgin polymer with recycle polymer (column 9, lines 45-49). Sferrazza et al does not explicitly teach forming the mixture into a filament with good colorability.

Studholme teaches forming a polymer mixture into a filament with good colorability (column 6, lines 30-34). Motivation for combining the blended polymer of Sferrazza et al with the forming method of Studholme is to reduce post consumer carpeting waste (Studholme, column 1, lines 25-30). The treatment with a metal salt of sulfoisophthalic acid as described by Studholme allows for the good colorability of the blended polymer mixture. Therefore, it would be prima facie obvious at the time the invention was made to one of ordinary skill in the art to have combined the two inventions.

With regard to claim 3, Studholme teaches that colorants can be added to the mixture when making the filament (column 5, lines 64-66).

With regard to claim 4, Studholme teaches that the polymer can be nylon (column 4, lines 7-9).

With regard to claim 5, Studholme teaches that the polymer can be nylon 6 or nylon 6,6 (column 4, lines 7-9).

With regard to claim 6, Studholme teaches mixing the nylon to have a range of sulfur from 1,000 to 3,000 ppm sulfur (column 5, lines 29-31). "A prior art reference that discloses a range encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness." In re Peterson, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). The range taught by Studholme makes obvious the disclosure of applicant's claim 6, which claims a sulfur range of 1,000 to 2,600 ppm.

With regard to claim 8, Studholme teaches mixing the nylon to have a range of amide groups of less than 35 meq/gm (column 5, lines 48-51). "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists." In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) The range taught by Studholme makes obvious the disclosure of applicant's claim 8, which teaches an amide range of 33 to 71 meq/gm.

With regard to claim 10, Studholme teaches adding pigment into the mixture when making the filament (column 5, lines 64-66).

With regard to claim 14, Sferrazza et al teaches blending virgin polymer with recycle polymer (column 9, lines 45-49). Sferrazza et al does not explicitly teach forming the mixture into a filament with good colorability.

Studholme teaches forming a polymer mixture into a filament with good colorability (column 6, lines 30-34). Motivation for combining the blended polymer of Sferrazza et al with the forming method of Studholme is to reduce post consumer carpeting waste (Studholme, column 1, lines 25-30). The treatment with a metal salt of sulfoisophthalic acid as described by Studholme allows for the good colorability of the blended polymer mixture. Therefore, it would be prima facie obvious at the time the invention was made to one of ordinary skill in the art to have combined the two inventions.

Studholme teaches mixing the nylon to have a range of sulfur from 1,000 to 3,000 ppm sulfur (column 5, lines 29-31). "A prior art reference that discloses a range

encompassing a somewhat narrower claimed range is sufficient to establish a prima facie case of obviousness." In re Peterson, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). The range taught by Studholme makes obvious the disclosure of applicant's claim 14, which claims a sulfur range of 1,000 to 2,600 ppm.

Studholme teaches mixing the nylon to have a range of amide groups of less than 35 meq/gm (column 5, lines 48-51). "In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists." In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990) The range taught by Studholme makes obvious the disclosure of applicant's claim 14, which teaches an amide range of 33 to 71 meq/gm.

7. Claims 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sferrazza et al (5,535,945) in view of Studholme (6,334,877) and Kay et al (5,160,347).

Sferrazza in view of Studholme teach the claims of applicant's claim 6 as discussed above. However, with regard to claim 7, Sferrazza in view of Studholme does not explicitly teach dyeing the fiber with cationic dye.

Kay et al teaches dyeing nylon fibers with cationic dye (column 3, lines 25-37). As motivation to combine the inventions, Kay et al teaches that the nylon fibers have an affinity or receptivity for either an acid or a cationic dye depending on the dye receptivity type of the nylon fiber (column 2, lines 34-38). Therefore, it would have been prima facie obvious at the time the invention was made to combine the fibers produced by the method of Sferrazza in view of Studholme with the dying method of Kay et al.

Sferrazza in view of Studholme teach the claims of applicant's claim 8 as discussed above. However, with regard to claim 9, Sferrazza in view of Studholme does not explicitly teach dyeing the fiber with acid dye.

Kay et al teaches dyeing nylon fibers with acid dye (column 3, lines 25-37). As motivation to combine the inventions, Kay et al teaches that the nylon fibers have an affinity or receptivity for either an acid or a cationic dye depending on the dye receptivity type of the nylon fiber (column 2, lines 34-38). Therefore, it would have been prima facie obvious at the time the invention was made to combine the fibers produced by the method of Sferrazza in view of Studholme with the dying method of Kay et al.

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kawauchi (5,276,083) in view of Kay et al (5,160,347).

Kawauchi anticipates claim 4 as discussed above. However, with regard to claim 12, Kawauchi does not explicitly teach using disperse dye on the fibers.

Kay et al teaches dyeing polyester fibers with disperse dye (column 2, lines 52-54). As motivation to combine the inventions, Kay et al teaches that the technique allows for minimum wet pick-up of the dye liquor. Therefore, it would have been prima facie obvious at the time the invention was made to combine the fibers produced by the method of Kawauchi with the dying method of Kay et al.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Beck whose telephone number is 571-272-2942. The examiner can normally be reached on Monday -Thursday, 8AM - 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Colaianni can be reached on 517-272-1196. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DTB
September 28, 2004

DTB

MICHAEL P. COLAIANNI
SUPERVISORY PATENT EXAMINER